

HARMONICS



THE VOICE OF THE ROWAN AMATEUR RADIO SOCIETY
June 2008 - issue 265



Minutes, May 12, 2008

The RARS met at 7:00 PM at the Rufty-Homes Senior Center

The meeting started 7:00 PM. Present were: Tommie Wood, N4YZ; Frank Waring, AF4D; Derwood Puckett, K4PXU; Ralph Mowery, KU4PT; Hugh Deadwyler, N3MJC; Ralph Brown, WB4AQK; Jim Morris, KA4MPP; Bob Rector, K4REO; H. C. Ledbetter, WB4IDQ and Nona Morris, KA4NHL.

Minutes of April 14, 2008 were read and approved.

On the business of incorporation, Tommy Wood, N4YZ, talked to the lawyer, Cecil Whitley, who is doing the paper work free of charge. He said the easiest

way to go is as a new club. Then we would not have to come up with back information on monies.

Was recommended the secretary send a letter of appreciation to Mr. Cecil Whitley when all is said and done.

Ralph Brown, **WB4AQK**, reported on the Firecracker Hamfest to be Saturday, July 12, 2008 – A full page ad came out in the Repeater Journal Magazine. On July 1st Ralph has to go by the office and request, July 11, 2009 for next years Hamfest and pay the rent for this year. Derwood Puckett, **K4PXU** made the motion for Ralph Brown, **WB4AQK** to go ahead with July 11, 2009. The motion was seconded by Frank Waring, **AF4D**. The motion passed. Ralph has asked Dan Kirk to help. Ralph will give out the lay out that needs to be done on the day of the Hamfest. Butch Edge does the start of the tickets and talk-ins. Our 2 hotdogs- and- drink for \$1.50 still stands.

Anyone going to the Durham Hamfest, May 24th, needs to take some flyers with them to give out. Ralph can not go because Helen Brown is having another Big Yard Sale with the proceeds going to the Cystic Fibrosis Foundation.

Derwood Puckett, **K4PXU** and Tommie Wood, **N4YZ** had to turn down the Dunn Mt. Park for field day because of the cost of the liability insurance. They wanted \$300 for the two days. They would not forgo the insurance. Tommie Wood, **N4YZ**, talked to Sloan Park and paid the \$84 fee (Tommie was reimbursed) for Saturday June 28th and Sunday morning, June 29th for Field day. Ralph Brown, **WB4AQK** will do his Sunday Morning Breakfast and will need a head (mouth) count. Saturday evening Tommie Wood, **N4YZ** and Gary Hattaway, **KQ1E**, are thinking about doing Saturday evening Supper. They will need a

Contents

May Minutes	1
Ham Happenings	2
Fred's back	5
N4UH Memorial	6

head count also. They will not object to any one pitching in to bring extras.

Derwood Puckett, **K4PXU** brought in a new application, Ben T. Dowell, **WB4FSD**, General Class, 165 Ketchie Estate Rd., China Grove, NC 28023, 704-855-1817. Derwood Puckett made the motion to accept him as new member. The motion was seconded by Frank Waring. The motion passed. Ben Dowell, **WB4FSD**, donated a Yaesu FT-60R Dual Band FM transceiver for a prize for the Firecracker Hamfest. It was suggested the secretary send a letter thanking **WB4FSD** for his generosity.

Treasurers report:5-10-08
On hand - \$3367.08
Dues - 20.00
Hamfest tickets-16.00
Donation refreshments- 6.50
Total \$ 3409.58

EXPENSES
SE Repeater Journal AD - 36.00
Refreshments - \$ 12.79

Balance \$3373.58
WD4KJZ account \$2953.36

The motion was made by Jim Morris **KA4MPP** to adjourn the meeting. Motion was seconded by Frank Waring, **AF4D**. The motion passed.

Nona Morris, **KA4NHL**, Secretary

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Ham Happenings

FCC Looks to Raise Vanity Call Sign Fees

The FCC released a Notice of Proposed Rulemaking and Order (NPRM) on May 8 seeking to raise fees for Amateur Radio vanity call signs.

Currently, a vanity call sign costs \$11.70 and is good for 10 years; the new fee, if the FCC plan goes through, will go up to \$12.30 for 10 years, an increase of \$.60.

The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. The first vanity call sign licenses issued under the current

The Rowan Amateur radio society
P. O. Box 593
Salisbury, NC 28145

The Rowan Amateur radio Society exists to secure for its members the pleasures and benefits of associating with persons commonly interested in amateur radio in any and all its facets. Its purpose is to facilitate the exchange of information, radio knowledge, fraternalism and individual operating efficiency among members. Society programs and activities are intended to advance the general interest and welfare of amateur radio in the general community.

The Society is a nonprofit organization and seeks no payment for services it provides the community's agencies.

Membership

Membership in the Society is open to all applicants who express a willingness to abide by the Society's Constitution and By-laws. Persons may apply at regular meetings and are considered elected when approved by two-thirds of those members present.

Meetings

Regular meetings are held on the second Monday night of each month at 7:00 PM at the Rufty-Holmes Senior Center at 1120 Martin Luther King Jr. Ave. S.

2008 Officers

President - Tommie Wood, N4YZ, 704-637-0024
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Vice-President -

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Harmonics, the club newsletter is published mostly monthly. Submit articles, complaints, corrections, or comments to the club Editor. Material may be reprinted provided proper credit is given.

Editor - Ralph Brown, WB4AQK

On the web www.RowanARS.org

Amateur Radio vanity call sign program that began in 1996 came up for renewal two years ago. Those holding vanity call signs issued prior to 1996 are exempt from having to pay the vanity call sign regulatory fee at renewal, however. That's because Congress did not authorize the FCC to collect regulatory fees until 1993. Such "heritage" vanity call sign holders do not appear as vanity licensees in the FCC.

ARC Replies to ARRL

At the ARRL ARES forum at the Dayton Hamvention, ARRL Emergency Preparedness and Response Manager Dennis Dura, K2DCD, announced that the American Red Cross (ARC) has finally moved to the issue of background checks for ARES volunteers.

In a letter dated May 8 of this year, Armond T. Mascelli, ARC Vice President for Disaster Response Services replied to President Harrison: "I can now report back to you that [these] actions have been completed and changes have been instituted which I trust resolves the concerns detailed in your letter. This effort took considerably more time and attention than originally envisioned, but I believe the results will now benefit our respective organizations.

"A new background consent form now [is] to be used by all Red Cross chapters for ARRL members and other partner organizations. The form and related process is limited to the name and social security number verification of the individual, and a criminal background check. References and suggestions to other related investigative possibilities have been stricken."

The ARRL will be working with the ARC in the negotiation and creation of a draft for a new "Memorandum of Understanding" (MOU) or similar document to replace the one which expired last year; Dura and Keith Robertory of the ARC will be leading the effort. When complete, the draft of the MOU will be presented to the leadership of both organizations for approval.

When requesting a background check on the ARC Web site, volunteers from partner agencies, such as the ARRL or ARES, should

select "I am an ARC partner" when asked "What is my Red Cross role?" Otherwise, volunteers will see the background check form that asks for "everything."

ARRL comments on two matters before FCC

On Tuesday, May 27, ARRL filed electronic comments concerning two matters that the FCC has under consideration.

The first set of comments concerns a company that filed a request for a waiver of Part 90 of the FCC rules; ReconRobotics, an electronics manufacturer, wishes to sell, and for its public safety customers to use, a robotic device that operates in the 430-448 MHz band. The Amateur Service has an allocation on a secondary basis. The second matter deals with GE Healthcare and their request for allocation of spectrum (as a secondary user) in the 2300 MHz band; the Amateur Service has a primary allocation in a portion of the requested band.

ReconRobotics filed a request with the FCC for a waiver of Part 90 of the Commission's Rules with respect to the Recon

Scout, a remote-controlled, maneuverable surveillance robot designed for use in areas that may be too hazardous for human entry. This device can be thrown, dropped or launched into hazardous areas and can provide an operator located a safe distance away with video and audio, along with infrared, biological, chemical, heat, radiation or other data. ReconRobotics seeks a waiver to permit equipment authorization of the Recon Scout, and its use by state and local law enforcement and firefighting agencies and by security personnel in critical infrastructure industries.

The ARRL contends that "Because [this device] operates on a channelized basis, each of the three channels being six megahertz wide, the necessary bandwidth of the device is apparently close to 6 MHz. [ReconRobotics] asks that it be granted an unspecified series of permanent waivers to allow the marketing and sale to, and use of this device by law enforcement and fire department personnel for public safety applications. The Amateur Service, which has a heavily occupied, secondary allocation in the 420-450 MHz band...would be potentially substantially impacted by grant of these waivers."

The ARRL's comments state that ReconRobotics "fails to establish that the 420-450 MHz band is the only viable choice and that no other band would be suitable; an obligation of the Petitioner in order to entitle it to a waiver." The ARRL asserts that ReconRobotics only claimed, but did not show, prove or demonstrate, that other bands were not suitable for its

purposes. In other cases before the FCC as recent as 2006, the Commission denied such waivers, saying, "We do not believe that the public interest requires grant of a waiver merely to accommodate a manufacturer's choice of a specific frequency when others are available."

The ARRL contends, the waiver request boils down to "trust us, we have checked into this."

One of the channels ReconRobotics is requesting use of -- 442-448 MHz -- is used by amateur repeaters (with band plans varying by locality) and also for Amateur television repeater inputs. "These repeater inputs, both for voice and video, are at high locations where line-of-sight to [ReconRobotics] devices should be expected anywhere in the United States. Repeaters in this band are routinely used for emergency communications via amateur Radio for numerous served agencies including FEMA, and so at times when [ReconRobotics] device may be expected to be used, the repeaters may be

expected to be in operation in the same areas," ARRL comments state.

In December 2007, GE Healthcare filed ex parte comments in response to a Notice of Inquiry (NOI) in the pending "MedRadio" proceeding, proposing that the band 2360-2400 MHz be allocated on a secondary basis for "Body Sensor Networks" (BSNs). These systems are apparently to be used for wireless patient monitoring. They are very short-range networks consisting of multiple body-worn sensors and nodes, connected via wireless to nearby hub stations at medical facilities and in homes. The Amateur Radio Service is currently allocated 2390-2400 MHz on a primary basis.

the ARRL states that GE Healthcare's proposal, however, makes "erroneous assumptions about Amateur uses in these bands, and the interference potential of the devices to Amateur Radio stations in residential areas is not known."

The ARRL, in its comments, said it "is far more concerned" about potential interference to BSNs from licensed Amateur Radio operation in the 2390-2400 MHz band: "The ramifications of radio frequency interference (RFI) to these systems in terms of danger to medical patients are obvious, and potentially severe." The ARRL contends "that the potential for interference

from Amateur Radio operations, which are in this band occasionally itinerant and mobile, but most often fixed in residential areas, to BSNs operated at a patient's residence would be...a problem."

NASA tool gives hams info on ionosphere

Last week at the Space Weather Workshop in Boulder, Colorado, NASA released a 4D live model of the Earth's ionosphere

<http://science.nasa.gov/headlines/y2008/30apr_4d_ionosphere.htm?list212589>. Without leaving home, anyone can fly through the layer of ionized gas that encircles Earth at the edge of space itself. All that is required is an Internet connection and a free copy of Google Earth <<http://earth.google.com/>>.

Using a Google Earth interface, users can fly above, around and through these regions getting a true 4D view of the situation. "The fourth dimension is time. This is a real-time system updated every 10 minutes," said W. Kent Tobiska, president of Space Environment Technologies and chief scientist of its Space Weather Division. The proper name of the system is CAPS, short for Communication Alert and Prediction System. Earth-orbiting satellites feed the system up-to-the-minute information on solar activity; the measurements are then converted to electron densities by physics-based computer codes. It is important to note, Tobiska said on the NASA Web site, that CAPS reveals the ionosphere not only as it is now, but also as it is going to be the near future.

"This is an exciting development," said NASA solar physicist Lika Guhathakurta on the NASA Web site. "The ionosphere is important to pilots, ham radio operators, earth scientists and even soldiers. Using this new 4D tool, they can monitor and study the ionosphere as if they're actually inside it." Guhathakurta made his comments on the NASA Web site.

For ham radio operators, this is a great application because it enables them to figure out what frequencies that are going to be available for communicating with any part of the world they want to communicate with at that moment in time. So ham radio operators who are in South Carolina want to talk to someone in Europe or Africa, they can know exactly what frequencies to turn to on their dial."

More information on this tool for radio amateurs can be found on the ARRL Web site

<<http://www.arrl.org/news/stories/2008/05/06/10081/>>

Ham Happenings selections are from ARRL Letters 18, 20 and 21

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The Ionospheric Conspiracy... Part 6

Fred, On the Verge

By Bob Brown, NM7N

Earlier, my correspondent, Fred, seemed to be suffering from the delusion that there was a conspiracy in progress, Ionospheric electrons being sopped up by spacecraft and with an ongoing cover-up aimed at keeping the result, poor HF propagation, from the world. This was especially vexing to Fred as the amateur radio community, where power levels are restricted, was affected the most.

Fortunately, with the help of Ralph, a wandering w7, it looked like we're getting a handle on Fred's paranoia. In fact, our strategy might reverse his attitude as he seemed to be making progress, almost ready to listen on the bands again after a long absence. There's no doubt that absence contributed to his problem but it was exacerbated by the fact that Fred's memories were all from Cycle 19, the "Golden Age of Amateur Radio," and "It's never been the same!" was his lament.

As things now stand, Fred managed to install a trapped vertical in his front lawn, and even has a nifty set of radials buried in the lawn. If anything, the challenge of installing the radials seems to have turned him around. But there was a dark side to it, the radial matter serving as a counter-conspiracy for Fred, but it did serve to ease the pain he felt earlier. So maybe his problems can be resolved.

At the time Fred put the radials in his lawn, he "floated" a semi-plausible story, that weak electrical currents in the ground serve to stimulate the health and growth of worms. That's right, worms. So with the avowed aim of improving the health of worms, and his lawn in the process, Fred put in the radial, placed the vertical in position and "ran up the flag." That was progress in more ways than one!

But before Fred even connected the coax to his S/Line receiver, he had some second thoughts. Not so much about the wisdom of what he'd done but the completeness of his cover story. He had, in the name of respectability, offered the story that the use of electric currents came from the local Ag School. That made him nervous as he might have to bring forth the source, say by giving a reference. He managed to find a way to finesse that one by coming up with the idea that he saw it in a magazine down at the Ag Extension office. That'd do the trick!

But not all his neighbors were what you'd call a "Klutz"; one or two of them had enough "smarts" to inquire about the system, not just nod in approval. He had to be ready to face them. So, quickly, Fred found an old lantern battery and connected it up to wire going out the basement window and to dummy resistors buried in the dirt; that way he could point to the energy source of his electric currents. Better yet, he found a couple of Read-Rite meters in his junk box and would have them handy to measure the voltage of the battery and the few mils going into the ground. With that, he felt he had all bases covered.

Then something else burst in on his new-found calm; the need to assure neighbors that his system would not cause QRM like all those electrified fences they'd read about recently. It seems the farmers were causing havoc in their area and it was all over the local papers. Fred, of course, was far removed from them but he could be accused too, right or wrong. But that lantern battery was his best defense, pure d. C. And no switch closures to worry about.

But then there was TVI to worry about too. Not that he had any immediate plans to get on the air again but if anyone saw oscillator lines on their screen, they'd think of that "worm guy", Fred, at once. Fred's defense, he said, was to play innocent. So if a phone call came in, "What are you DOING to my TV?", he could calmly say, "Nothing, I'm just sitting here, watching mine." That's the "Who, me?" defense. FB!

On thinking more about it, he told Ralph that he couldn't just leave it there, with nagging doubts unresolved. He'd have to deflect the inquiry away from him, to an inanimate object or another person. Of course, phone answering machines would be "targets of opportunity" so he could add "Maybe it's your answering machine or one of your neighbor's." And

there were all those wireless baby monitors; They radiate like mad and over large areas!

As for deflecting any inquiry to another person, that came up in connection with the wireless dog collars. People might have thought that was what he was installing while he was using the edging tool around the border of his lawn. One he started cutting the radial pattern, however, that idea should have vanished, at least with regard to his efforts, but you never can tell: the thought might have lingered. He'd have to learn more about the technique so he'd appear knowledgeable, even sympathetic, about the problem but make no mistake about it, the "d. c. defense" was his fall-back position.

Ralph reported that he listened to all Fred's woes and could not help but have the thought "What a tangled web we weave . . ." run through his mind as it went on. But you have to admit Fred has something else to focus on now, with some variety and immediacy. That's a lot better than gnawing on the same old bone ad infinitum. How he balances these demands remains to be seen. Hopefully he won't lose sight of the goal, getting that receiver going and listening on the bands.

I asked Ralph about Fred's thoughts in that regard. Ralph said Fred was moving ahead, but in a deliberate manner. For one thing, Fred said his shack was something of a "disaster area" and needed not only cleaning up but containment. The latter comes up as Fred has to be prepared to have a neighbor in his basement as part of his "d. C. Defense" and can't just leave the operating position open for public scrutiny. So that'll take some doing and is at the top of the list.

There's still the matter of lighting up the Collins 32S-3 and getting a SWR curve. Those old 6146's should be OK for that small job. All in all, Ralph said there was a note of excitement in Fred's voice as he spoke of all he had to do. Once he gets those traps positioned to his satisfaction, he'll start listening seriously. We both hope and pray he likes what he hears; his future depends on it. Really!

An aside: As I copied this I remembered that I, about this time, owned a small tiller that could be fitted with an edging blade. Would you believe that I loaned it to Henry, N4UH, to put in radial on his antenna farm? Editor

I don't know how many got the pictures Wayne sent me earlier, but I think it is something all you who knew Uncle Henry should know about. It is a good way to end this issue. I don't have room for the entire email msg that Wayne got but I'll send it to all who are interested . Editor

